

Amendments to the Specification

Please replace paragraph [0046] with the following amended paragraph:

[0046] The multiplexing operation will divide the DS3 into four streams. Each modem stream will accept every fourth bit from the DS3. This results in four parallel data streams at 11.184 Mbps. With added overhead, the modem streams carry 12.96 Mbps. In this embodiment, a 260 byte packet is generated. Two bytes are used for synchronization, three are control bytes, and 16 bytes are used for Reed Solomon error correction. 236 bytes carry information, resulting in a 90.77% efficiency and 11.76 Mbps of capacity. In order to be able to reconstruct the DS3 stream at the far end, additional structure and overhead is included in each stream. Each $\frac{1}{4}$ DS3 stream is placed into 64 byte (512 bit) packets by the framer 105. The first byte is a fixed framing pattern allowing the receiver to find the start of the packet. The second byte has a four bit packet number and two bit stream number which is used at the receiver to join four packets from the four corresponding modem streams together to form a DS3 stream. The packet number is incremented as each packet is sent. The packets enter the four transmitters simultaneously. Variable delays in the transmitters and receivers will cause some skew in the data as it passes through the modems and twisted pair portion of the system.